

REVISION OF THE SUBFAMILY *TENEBRIONINÆ*,
FAMILY *TENEBRIONIDÆ*.

(AUSTRALIAN SPECIES: WITH DESCRIPTIONS OF NEW SPECIES
OF *TENEBRIONINÆ* AND *CYPHALEINÆ*).

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(With six text-figures.)

Revision of the Subfamily *Tenebrioninæ*.

This subfamily is in more need of revision than any of the *Tenebrionidæ*, through the extraordinary complications that have arisen through the imperfect descriptions of early writers, notably of Boisduval; and this has been aggravated by the diversity of determinations made by later authors. As these complications apply to some of the commonest of Australian insects, it is hoped that the author's attempt at reaching a stage nearer finality will assist other entomologists by clearing our catalogues of names that are either synonyms, or belong to lost types, and are valueless. This task has been facilitated by the aid of Mr. K. G. Blair, of the British Museum, who has sent me a collection of specimens, some of which have been compared with the types of Pascoe and Hope, while others have some historic value from their labels.

The subfamily is now held to include the *Cœlometopides*, *Tenebrionides vrais*, and *Toxicides* of Lacordaire.

Distribution.—In the new Catalogue of Junk, in which the *Tenebrionidæ* are so ably edited by Gebien, there are 97 genera of the subfamily, excluding *Microphyes*, *Chileone*, and *Ephidonius*, and including *Teremenes* (vide infra). Of these, only 16 are represented in Australia, of which 10 are exclusively so (endemic). These 10 are distributed as follows:—

Exclusively Australian.

Brises—Central Australia (including Northern Territory).

Asphalus—New South Wales, Queensland (coastal districts).

Hypaulax—All States; widely distributed.

Hydissus—New South Wales, Queensland, Lord Howe Island.

Oectosis—Victoria, South Australia.

Meneristes—New South Wales, Victoria, Tasmania, Queensland, South Australia.

Teremenes—New South Wales, Victoria, Tasmania, Queensland, South Australia.

Synercticus—New South Wales, Queensland.

Tanylypa—Tasmania.

Paratoxicum—Tasmania, and Victorian Alps.

Not exclusively Australian.

The remaining six genera are distributed as follows :—

Pediris—Cape York, Austro-Malay Islands.

Encyalesthus—India, E. Asia and Japan, Austro-Malay Islds., E. Australia.

Promethis—Sikkim, Lord Howe Island, Australia (all States).

Menephilus—Europe, Asia, Africa, Australia (all States).

Tenebrio—Cosmopolitan; two species universally distributed as flour- and grain-pests; other species world-wide.

Toxicum—Africa, America, Asia, Australia (all States).

BRISES and EPHIDONIUS.

In Junk's Catalogue, Herr Gebien places *Brises* with the *Tenebrioninæ*, and *Ephidonius* with the *Cyphaleinæ*; but whatever classification be adopted, it seems quite undesirable to separate them. In the trapeziform shape of the head, with the eyes widely separated, both are much nearer the *Tenebrioninæ*, as further indicated in the continuous epipleuræ; while in the form of the antennæ, the more widened emargination of the thorax, and especially in the carinate prosternum, they show a strong relationship with the *Cyphaleinæ*. Both, however, have marked characters in which they differ very much from each of these groups. (1) In the palpi, where the last joint of the maxillary palpi is at most rather narrowly triangular; in *B. trachynotoides* Pasc., this joint is so narrow as to be considered subulate; whereas in both *Tenebrioninæ* and *Cyphaleinæ* it is strongly

securiform. (2) The posterior intercoxal process in both is narrow, triangular, or very little rounded at apex; whereas in *Tenebrioninæ* and *Cyphaleinæ*, this process is generally widely rounded. (3) The legs and tarsi form the greatest barrier to the inclusion of these genera in either group—widely differing from the *Tenebrioninæ* in their more elongate form, clothed as to their tibiæ and tarsi with long hairs; while equally distinguished from the *Cyphaleinæ* by their unusually long tibial spurs and tarsal claws. The author suggests (1) that *Brises* = *Ephidonius*; (2) that *Brises*, at present, be considered as a single subgroup of the *Tenebrioninæ*.

I cannot find any satisfactory character, beyond sculpture, to separate the two genera; and in the case of the new species, *B. Blairi*, the sculpture is intermediate between that of *B. trachynotoides* Pasc., and *E. Duboulayi* Bates. The name *Ephidonius* should, therefore, be sunk, and the species may be tabulated as follows, all of them being before me.

BRISES Pasc. (Ann. Mag. Nat. Hist., 1869).

Ephidonius Pasc. (*loc. cit.*).

- 1(3) Elytra bicostate.
- 2. Upper surface nitid *Blairi*, n.sp.
- 3. Upper surface opaque *trachynotoides* Pasc.
- 4(6) Elytra bicostate, upper surface nitid.
- 5. Costæ subobsolete *acuticornis* Pasc.
- 6. Costæ strongly raised *Duboulayi* Bates.
- 7. Elytra with 5 slightly raised costæ, surface opaque. *parvicollis* Blackb.

The two following genera, *Asphalus* and *Hypaulax*, may be grouped as *Cælozetopinae*, only distinguished from "Tenebrionides vrais" of Lacordaire, by their short metasternum and apterous body.

ASPHALUS Pasc.

- 1. Elytral surface shallow, surface very nitid. *ebeninus* Pasc.
- 2. Elytral striæ deep, surface less nitid. *striatus* Curt.

HYPAULAX Bates.

Chileone Bates.

Chileone is not (as Blackburn also suggested) sufficiently differentiated from *Hypaulax* to deserve generic distinction. The

only marked distinctions given by the author (Trans. Ent. Soc. Lond., 1868, p.264) are the bisinuate thorax, with the angles prominent, and the alveolate sculpture of the elytra; the other distinctions are either slight or elusive. Of the marked distinctions, the first two are certainly found in *H. insularis* Hope (= *H. iridescens* Blackb.), and the last (the alveolate elytra) is closely approached in the species described below (*H. foveatus*). I believe I have seen specimens of all the described species. If I have identified *H. interioris* Blackb., correctly, in a specimen from N.W. Australia, it is further distinguished by its strongly punctate abdomen—a character shared to a less, and very variable, degree by that widely distributed and most variable species, *H. oreus* Pasc. Bates evidently did not sufficiently consider the great variability in size, sculpture, shape of prothorax, and convexity of form, that is to be noticed in examining long series; so that, as he himself admitted in the synonymy of *H. ovalis* and *H. oblonga*, varieties have been described as species; while Macleay described two species in a few lines, without having seen the descriptions of Bates' *H. sinuaticollis** and *H. tarda* (Trans. Ent. Soc. New South Wales, p.285).

The following are almost certainly synonyms : —

H. gayndahensis Macl. = *H. oblonga* Bates = *H. ovalis* Bates = (? *Upis crenata* Boisd.).

H. opacicollis Macl. = *H. sinuaticollis* Bates = *H. marginata* Bates.

H. iridescens Blackb. = *H. (Platynotus) insularis* Hope.

The last has already been suggested by Champion.

The descriptions of three new species will be found below.

Table of *Hypaulax*.

- 1(3) Elytra sulcate, its lateral intervals sharply elevated.
2. Pronotum opaque, lateral border little raised or thickened.....
..... *insularis* Hope; *iridescens* Blackb.
3. Pronotum nitid, lateral border strongly raised and thickened.....
..... *Spenceri*, n.sp.
- 4(6) Elytra striate, intervals convex.
- 5 First two striae deep, punctures obvious.... *ovalis* Bates; *oblonga* Bates;
..... *gayndahensis* Macl.; (?) *crenata* Boisd.

6. First two striae shallow, punctures very small or obsolete.....
.....*tenuistriata* Bates.
- 7(11) Elytra more or less striate, intervals flat.
8. Pronotum and elytral intervals clearly punctate..*puncticollis*, n.sp.
- 9(11) Pronotum and elytral intervals scarcely visibly punctate.
10. Prothorax arcuate in front, anterior angles advanced. *orcus* Pasc.
11. Prothorax truncate in front, anterior angles not advanced... ..
.....*ampliata* Bates.
- 12(22) Elytra seriate-punctate.
- 13(15) Elytral punctures alveolate.
14. Apex of prothorax bisinuate, lateral borders thick and crenulate.....
.....*Deyrollei* Bates.
15. Apex of prothorax truncate, lateral borders less thick and scarcely
crenulate. *foveata*, n.sp.
- 16(22) Elytral punctures much smaller.
- 17(19) Size large (17-23 mm. long).
18. Colour subopaque black, seriate punctures smaller.....*interioris* Blackb.
19. Colour nitid-black, seriate punctures larger..*marginata* Bates;
sinuaticollis Bates; *oparicollis* MacL.
- 20(22) Size small (12-15 mm. long).
21. Prothorax with lateral channel.....*tarda* Bates.
22. Prothorax without lateral channel *opacula* Bates.

Nyctobates and *Setenis* are not represented in the Australian fauna, the former being limited to America. It is possible that *Promethis* (*Nyctobates*) *sterrha* Oll., from Lord Howe Island, is a *Setenis*, but I am not able to state this definitely, through lack of knowledge of the genus. Under *Setenis*, Herr Gebien has included two of Boisdual's mysteries, *Upis crenata* Boisd., and *U. Lottinii* Boisd. These will be discussed below. Having examined the types of *Meneristes curtulus* Oll., and *M. vulgaris* Oll., from Lord Howe Island, I should unhesitatingly place them under *Hydissus*, the larger species (*M. vulgaris*) being extremely close to *H. feronioides* Pasc. The species may be distinguished as follows :—

Hydissus Pasc.

1. Pronotum smooth, elytral intervals strongly convex, seriate punctures evident..... *feronioides* Pasc.
2. Pronotum finely punctate, elytral intervals little raised, seriate punctures very small, almost hidden in striæ *vulgaris* Oll.
3. Pronotum more strongly punctate, elytral intervals flat, seriate punctures larger than in 2 (also shorter and wider)..... *curtulus* Oll.

Under *Encyalesthus*, two species have been described, to which a third is now added. These may be tabulated as follows:—

Encyalesthus Motsch.

- 1(3) Colour black.
- 2. Subnitid, hind tibiæ of ♂ with margins entire *punctipennis* Pasc.
- 3. Very nitid, hind tibiæ of ♂ with excised margin *excisipes*, n.sp.
- *4. Elytra green or bronze, posterior tibiæ of ♂ angulate... *atro-viridis* MacL.

PROMETHIS.

Before attempting to tabulate the species of this genus, it is necessary to clear the ground by a discussion of Boisduval's species, the inadequate descriptions of which contain neither dimensions nor figures (with one exception), and the types are mostly lost. To take these in turn, *Pediris* (*Upis*) *sulcigera* is the one member of the Subfamily figured in the "Voyage de l'Astrolabe," and is well known in European museums. Originally described from Amboyna, I have specimens from New Guinea and Cape York, the latter taken by Mr. H. Hacker, as recorded by me (These Proceedings, 1909, p 125).

Upis Lottinii Boisd., placed by Gebien under *Setenis*.—There is a specimen in the British Museum consignment, labelled New South Wales (F. Bates' Coll.), with a second label bearing the name "*Upis Lottinii* Boisd., Schaufuss." This specimen is undoubtedly a *Promethis*, and is probably a small *P. nigra* Bless. A second specimen, bearing similar labels, has been further labelled by Mr. Blair as *P. lethalis* Pasc. This specimen, I should consider as the typical *P. nigra* Bless. The original habitat of *U. Lottinii* was stated to be New Guinea. Having little doubt as to the synonymy of *P. lethalis* Pasc., with *P. nigra* Bless., (from specimens of the former sent by Mr. Blair, compared with

* Macleay omitted any reference to sex in his description, or to the fact that the elytra are often a brilliant brassy-bronze colour; the females have the posterior tibiæ without this angular swelling. I have examined many specimens.

Oectosis.—The single species, *O. cylindrica* Pasc., is not common in collections. I have a specimen from the Mallee district of Victoria.

the excellent description and figure by Blessig) I should place *U. Lottinii* Boisd., as a probable synonym; this doubt rendering it undesirable to preserve the name.

Upis crenata Boisd.—There has again been much disagreement as to the insect described under this name. The Macleay Museum has, under this name, what is undoubtedly *P. nigra* Bless., probably so identified by Macleay. The British Museum has a specimen of *Hypaulax oblonga* Bates, labelled as *U. crenata* Boisd.; while another specimen bearing this name in the British Museum, is certainly *Hypaulax tenuistriata*; and Herr Gebien writes that he has an *Hypaulax* under Boisduval's name. The ten words of Boisduval's description, without dimensions, apply more aptly to *Hypaulax* than to *Promethis*, especially "thorace lævigato, subconvexo, lateribus rotundato," since the species of *Promethis*, in no case, have a lævigate thorax, nor are the sides notably rounded. Although the name has reappeared in Junk's Catalogue under *Setenis*, it should be consigned to oblivion, as a probable synonym of the common *Hypaulax oblonga* Bates. It is scarcely possible that Boisduval should have failed to collect this in the Sydney district.

Baryscelis laticollis Boisd.—It would be tedious and useless to follow up the various attempts to determine this species. In 1869, Pascoe described *Meneristes laticollis*, which is possibly the same thing, though Champion expresses a contrary opinion (Trans. Ent. Soc. 1894, p.392), without giving any reason. There seems little cause to doubt that Pascoe's species is the same as that described by Blessig as *Tenebrio australis*, by Motschulsky as *Asiris angulicollis*, and by Blanchard as *T. nigerrimus*. Mr. Blair writes that in the Bates Coll., he has "one series over *laticollis* Pasc., and another over *australis* MacL.; but I cannot distinguish between them." The Rev. T. Blackburn proposed, as his solution of the tangle, the identity of *T. australis* Boisd., and *B. laticollis* Boisd., but even Boisduval could scarcely describe the same insect under two genera in two successive pages. Moreover, the words "antice emarginato" applied to *B. laticollis*, are not contained in the ten words that describe *T. australis*; and this being a marked character in Pascoe's

species, it is likely enough that Pascoe's suggestion is the true one.

Baryscelis politus Boisd., seems to have been left unnoticed by writers, so that not even a conjecture, so far, has been made as to its identity; nor have I seen any insect so identified. From the short note by Boisduval, "Il est un tiers plus petit que le précédent, et le corselet est moins rétréci postérieurement," it would seem to be identical with *M. intermedius* Pasc., a smaller (and female) variety of *M. laticollis* Pasc. It seems possible to me that *T. australis* Boisd., is identical with *Promethis quadricollis* Pasc.; and that *T. nigerrimus* Boisd., = *M. servulus* Pasc., which, again, is certainly (from compared types) identical with *Menepphilus convexiusculus* Hope.

Having examined a very large number of *Promethis*, both from our museums and from numerous collections, the following synonymy is almost certain :—

P. lethalis Pasc., = *P. (Iphthimus) nigra* Bless.

P. Pascoei Macl., = *P. quadricollis* Pasc.

P. lethalis Pasc., at furthest, can only be considered as a variety of *P. nigra*. The Queensland specimens show a great deal of variation, *inter se*; a long series taken by Mr. Lea, at Cairns, have the hinder part of the prothorax more sinuate, with the elytral punctures more hidden, than is the case with the typical *P. nigra* of the Southern States. Moreover, specimens that have been for some time in spirits, show a much clearer and coarser puncturation that is apt to mislead. A similar variation is to be noticed in *P. quadricollis* Pasc., but having examined the type of *P. Pascoei* Macl., and compared it with specimens sent by Mr. Blair as *P. quadricollis* Pasc., I have no doubt of their identity. Most probably, Pascoe's locality, Swan River, for his species, is a mistake. I have seen only *P. angulata* Erichs., from West Australia; while hundreds of specimens of the other species have been examined from the Eastern States. The known species of Australian *Promethis* may be tabulated as follows, three new species being added and described below, *P. Harmandi* Oll., from Sikkim, being omitted, as unknown to me.

- 4-Hind tibiæ of ♂ with triangular tooth, its apex greatly enlarged and curved *tibialis*, n.sp.
 var. Hind tibiæ without this tooth *proximus*, n.var.
 5.All tibiæ of ♂ bidentate, form subcylindric. *dentipes*, n.sp.

There is little doubt that *M. intermedius* Pasc., is only a smaller form of the common *M. laticollis*. Mr. Blair has sent me specimens compared with types, and has expressed his own agreement with this. The type of *M. intermedius* Pasc., is a female, and is of the form very common in New South Wales, the larger form being more often found in Tasmania and Victoria. *Meneristes* is a variable and 'difficult' genus to separate into definite species, and probably more species will be found. The new species, described below, are all very distinct, two of them from their male tibial characters as shown by the outlines figured below — traced with a camera. Mr. Lea has taken a number of *Meneristes* at Cairns and Atherton, which are very nitid, and have larger elytral punctures than the typical *M. laticollis* Pasc. For the present I can only treat this species as a variety.

M. servulus Pasc., = *Menephilus convexiusculus* Hope, = (?) *M. nigerrimus* Boisd.—Mr. Blair sends specimens compared with Pascoe's and Hope's types, which show this. I had already noted it on my visit to the Hope Museum in 1907. There is also a specimen in the British Museum box identical with *M. servulus* labelled *M. nigerrimus* Laf., but the doubt that must always exist in Boisduval's species renders it undesirable to retain the name. At any rate this species requires another generic title, differing markedly from *Meneristes* in (1) the structure of the prothorax, with the rounded unproduced front angles; (2) the very short apical spines of the tibiæ; (3) the quite different onychium. As regards (3), Herr Gebien has been kind enough to point out to me the very unusual onychium of *M. laticollis* Pasc., with its several spines besides the two usual setæ, and he further adds, "I do not know another genus, except *Phrenapetes* of South America, in which that onychium occurs." I therefore propose the name *Teremenes* for *M. convexiusculus* Hope, and *M. longipennis* Hope, the latter of which has also been clearly identified by specimens sent from the British Museum, and which

is probably only an elongate and larger variety of *M. convexiusculus* Hope, but which, for the present, I would retain as separable from that species. To these I would add a third species from North Queensland, received from various collectors; and tabulate them as follows:—

TEREMENES, n.gen.

1. 17-18 mm. long, pronotum and elytral intervals finely punctate.....
.....*longipennis* Hope.
2. 13-15 mm. long, pronotum, elytral intervals, and underside smooth or
only microscopically punctate
.....*convexiusculus* Hope, *serrulus* Pasc., (?)*nigerrimus* Boisd.
3. 13-15 mm. long, pronotum, elytral intervals, and underside strongly
punctate.....*socius*, n.sp.

T. longipennis Hope, is recorded from Tasmania and South Australia. I have specimens also from Victoria and New South Wales.

T. convexiusculus Hope, is widely distributed in all the Southern States.

T. socius, n.sp., seems to be confined to North Queensland. Its distinction of sculpture is very marked, while it also has sharper hind angles to the prothorax, and a narrower lateral border, with the front angles less depressed and more evident.

Microphyes rufipes MacL.—I have examined the type of this, and identified it in my own Coll., from Queensland and West Australia (H. Brown). It should be transferred to another subfamily, the *Ulominæ*, I think, but it is certainly out of place in the *Tenebrioninæ*.

Synercticus piceus Pasc., = *S. heteromerus* Newm. — A most variable insect in size. My specimens vary from 8 to 13 mm. in length.

Synercticus and *Tanylipa* are aberrant members of the *Tenebrioninæ* in having their anterior coxal cavities open behind. For the present, they must be held as anomalous forms of the subfamily, with a doubtful relationship.

TOXICUM Latr.

Eight names have been published as belonging to the Australian species of this genus. In my opinion, these should be reduced to three, with a synonymy as follows:—

(1) *T. curvicorne* Blkb., = *T. spretum* Blkb., = *T. parvicorne* MacL., = *T. brevicorne* Pasc.

(2) *T. addendum* Blkb., = *T. distinctum* MacL., = *T. punctipenne* Pasc.

(3) *T. gracile* Pasc.

Of these, I have examined the types of *T. spretum*, *T. parvicorne*, and *T. distinctum*; and specimens compared with types by Mr. Blair of *T. curvicorne*, *T. punctipenne*, and *T. gracile*; while *T. brevicorne* is the commonest species in Victoria and New South Wales, and is, no doubt, correctly named in the Macleay Museum. Mr. Blair, moreover, writes that he has placed *T. curvicorne* in the British Museum Collection as a synonym of *T. brevicorne*, an opinion with which I concur, after seeing the specimens sent by him.

All the species I have seen in a fresh condition, except *T. gracile*, have an opaque velvety indumentum which can be removed by friction. The type of *T. spretum* Blkb., in the South Australian Museum, is, I consider, an abraded specimen of *T. brevicorne* Pasc., the elytral intervals and punctures being a little more clearly defined and its surface more nitid than in the fresh specimens. In a long series, the male presents variations in the length of the horns, as shown in other horned insects (e.g., *Onthophagus*, *Bolboceras*, etc.); thus the type of *T. parvicorne* MacL., is, I consider, a specimen of *T. brevicorne* Pasc., with unusually stunted horns. Mr. Champion has published the synonymy of *T. addendum* Blkb., with *T. punctipenne* Pasc.; while *T. distinctum* MacL., is undoubtedly the same species. As pointed out by Champion, Blackburn (and I would add Pascoe and Macleay) failed to notice the angular enlargement—or blunt tooth—on the inside edge of the anterior femora of the male; a pronounced character in *T. punctipenne* Pasc. In *T. brevicorne* Pasc., this tooth is smaller but evident, while in *T. gracile* Pasc., it is even less obvious, though present.

With regard to the antennæ, Blackburn overlooked the contradiction contained in Pascoe's description of *T. brevicorne* (Journ. of Ent. 1866, p.454). In the Latin part, this reads "antennarum clava triarticulata," while in the longer English notes below, he writes "club of the antennæ four-jointed." From my examination of the five species tabulated below, I find the club to be as follows:—

T. punctipenne Pasc.—Club of 3 joints, easily differentiated from the preceding joints.

T. brevicorne Pasc.—Club of 4 joints, the 8th transverse, but more triangular than the 9th joint.

T. gracile Pasc.—The slender club may be considered as having three or four joints, the 8th being intermediate in size between the 7th and 9th, but so much smaller than 9, and in shape like 7, that I should consider the club as rather 3-jointed than four.

T. insigne, n.sp.—Club of 4 joints, easily differentiated from the preceding joints.

T. quinque-cornutum, n.sp.—Club of 4 joints, easily differentiated.

The five species can be readily tabulated by the character of the horns of the male as follows:—

- (1.) *Clypeal horns* separate, starting from near the corners of the clypeus, and nearly vertical.

Frontal horns gently incurved, pointing upwards, with semicircular fringe of red hair from near the apex on the outside to about $\frac{1}{2}$ way down the inside..... *punctipenne* Pasc.

- (2.) *Clypeal horns* shorter than in (1), separated, but not starting from opposite corners of the clypeus, and diverging.

Frontal horns semicircularly incurved, pointing inwards, with smaller fringe of red hair round the apex, above and below..... *brevicorne* Pasc.

- (3.) *Clypeal horns* connected at base, starting from the middle of the clypeus, forming the letter Y, with the common base wide.

Frontal horns moderately incurved, pointing upwards, nearly as in (1), with fringe of yellow hair starting from near the apex on the outside and continued half way or more on the inside..... *gracile* Pasc.

- (4.) *Clypeal horns* abbreviated into wide conical tubercles at the corners of the clypeus.



Frontal horns strongly incurved at base, the extreme apex again incurved, widened, and deflexed, with a wide apical surface nearly meeting, with a fringe of red hair on the outside only, extending, but narrowly, to half way down. *insigne*, n.sp.

(5.) *Clypeal horns* three, the middle one largest and widely triangular, the two lateral ones short, also triangular, forming the extension of the canthi.

Frontal horns flattened, widest seen laterally, sharply incurved at base, twisted backwards at apex, with very small tuft of yellow tomentum on outside of apex..... *quinque-cornutum*, n.sp.

Paratoxicum iridescens Champ.—I have taken a specimen of this at Mt. Buffalo, Victoria.

BRISES BLAIRI, n.sp.

Ovate, depressed, glabrous, nitid-black, oral organs, joints 1-2, and 8-11 of antennæ, and tarsi, red.

Head closely and distinctly punctate, mandibles bifid at apex, labrum emarginate and rounded, epistoma arcuate in front, rounded at sides, making an obtuse angle with the canthus, the latter raised and angulate (subcornute) and lightly impinging on the eyes, epistomal suture sulcate and arcuate, the forehead on a higher plane than the epistoma, eyes large, transverse, widely separated and free of the prothorax, last joint of maxillary palpi triangular; antennæ not reaching the base of prothorax, rather slender at base, moderately enlarged at apex, joint 3 about as long as 4-5 combined, 4-7 obconic, 8-11 rather shortly ovate. *Prothorax* 3.5 × 6 mm., widest at middle and base, arcuate at apex, the anterior angles round and little advanced, sides strongly widened to the middle, then widely sinuate to the acutely produced and dentate posterior angles, without any defined border, lateral margins widely explanate and reflexed, concave anteriorly, convex posteriorly, separated from disc by a groove; disc with medial line faintly indicated, and two basal foveate depressions; minutely punctate. *Scutellum* transversely triangular. *Elytra* wider than prothorax at base and nearly thrice as long, ovate and rather flat, shoulders rather square, epipleural fold slightly reflexed, horizontal margins wide on basal half, narrowing towards apex, with a separating sulcus containing an irregular row of

punctures becoming obsolete behind, with two raised costæ on each elytron, the first originating abruptly at some distance from the base, and obsolescent about half-way, the second starting considerably behind the first and continued a little further backward, the intervals with indistinct rows of shallow punctures, the apical declivity a little rugose and finely pustulose, also a row of indistinct pustules on each side of suture on apical half. *Prosternum* punctate, its flanks ridged on the inside, its process narrowly carinate and produced, mesosternal cavity wide, with raised margins, posterior intercoxal process rounded, abdomen minutely punctate, epipleuræ smooth, tibiæ pustulose, the front tibiæ slightly bent, tibial spurs and tarsal claws very long, the tarsi clothed with long red hair. *Dimensions*, 16×8 mm.

Hab. Killalpanima, 100 miles east of Lake Eyre (H. J. Hillier).

A single specimen (δ ?) sent by Mr. K. G. Blair for examination, and in whose honour I name it, is easily distinguished from the only other bicostate *Brises* by its nitid surface, wider form, and very different sculpture.

In the structure of the head, with the epistoma on a lower plane than the forehead, and the eyes quite free of the prothorax, it is more like *B. Duboulayi* Bates, and is interesting as showing a connecting link between two aberrant forms. Type in the British Museum.

A second specimen has been lately sent for determination from the National Museum, Melbourne, labelled "Finke R.; N. Australia," taken by Professor Baldwin Spencer.

HYPAULAX FOVEATA, n.sp.

Elongate-ovate, nitid black; antennæ, tibiæ, and tarsi dark castaneous, inside of tibiæ and tarsi beneath clothed with pale golden pubescence.

Head very wide, truncate in front, narrowed behind the eyes, smooth on forehead, finely punctate on epistoma and labrum, the last prominent and ciliate, suture semicircular, mandibles slightly notched at apex, antennæ stout, joint 3 scarcely longer than 4, 7-11 enlarged, 8-10 subquadrate, 11 longer than 10. *Prothorax*

wider than long (about 6×7 mm.), truncate at apex, the angle feebly advanced, wider at apex than at base, anterior angles rather squarely rounded, lateral rounding very slight on the anterior part, a little sinuate posteriorly, its angle prominent and acute, pointing obliquely outwards, margins fairly wide in front, narrowly channelled within, margin and channel narrowed (sometimes with a slight crenulation) before the sinuation; base slightly bisinuate and thickly margined; disc with faint median line, and, under a strong lens, seen to be finely punctate. *Scutellum* transverse. *Elytra* slightly wider than prothorax at base, gradually widening to beyond the middle, sinuately and strongly narrowed at apex, with moderate declivity; thickly margined at base, humeral angle very obtuse but prominent, lateral margin and channel narrow; substrate, with nine lines of large foveæ, the last on margin, sometimes confluent but smaller and punctiform on the first row and near apex; an extra scutellary row consisting of about three elongate punctures. Abdomen faintly striolate, intercoxal process widely rounded, its margin interrupted at apex; prosternum with three wide carinæ, the two outside irregularly thickened and crenulate within, the deep sulci between the carinæ produced in front of coxæ, prosternal process rounded behind; front tibiæ strongly curved at apex. *Dimensions*, $22-25 \times 7\frac{1}{2}-9$ mm.

Hab.—Dalveen (H. J. Carter), Stanthorpe (H. Cox) Queensland; Tenterfield, New South Wales (Dr. Clark).

Six specimens examined, the males generally larger, wider, and less convex than the females. The species differs from all described species by the large foveate punctures of the elytra, very little smaller than in *H. (Chileone) Deyrollei* Bates, from which it differs in its narrower, longer, and less depressed form, the much less produced and wider anterior angles of prothorax, with its less thick and crenulate border. (In only one specimen of *H. foveata* is this crenulation marked). Though not strictly striate, the intervals are raised, and, viewed from behind, the rows appear to be in linear depressions. It is noteworthy that *H. Deyrollei* Bates, occurs within the same geographical area, and has been captured by the author at Guyra and Tenterfield,

while four specimens of *H. foveata* were taken at Dalveen. Types in the author's Coll.

HYPAULAX PUNCTICOLLIS, n.sp.

Elongate-obovate, dull black above, nitid beneath, antennæ reddish, tarsi with golden tomentum.

Head: mandibles bifid, epistoma truncate at apex, oblique at sides and continuous with the canthus, limiting suture arcuate and fine, forehead evenly convex, the whole closely and not very finely punctate. *Prothorax* $4 \times 5\frac{1}{2}$ mm., subtruncate at apex and base, anterior angles obtuse and scarcely advanced, sides feebly arcuate, abruptly incurving behind, posterior angles obtuse, deflexed and not at all produced or dentate, base and sides with narrow, raised margin, that of the latter with a subangular twist at the point of incurving; disc without foveæ or central line, densely and regularly punctate, like the head. *Scutellum* very small. *Elytra*: basal border thickened and raised, shoulders obtuse, sides scarcely sinuate at apex; striate-punctate, the striae shallow and unevenly defined, the seriate punctures small, fairly even in size and position (much smaller and closer than in *H. orcus* or *H. ampliatus* Bates; about three punctures would go to the width of an interval), interstices almost flat throughout, and distinctly punctured. Abdomen striolate and finely punctate, prosternum coarsely punctate, its process sulcate at the sides, the sulci produced behind the pro-coxæ, its apex rounded. Protibiae rather strongly bent and incurved at apex. *Dimensions*, 18×7 mm.

Hab.—Onslow, West Australia.

A single specimen in the Melbourne Museum differs from *H. interioris* Blkb., in (1) its distinctly punctate head and thorax (a character Blackburn could scarcely have left unnoticed had it existed in his species); (2) the unproduced obtuse posterior angles of prothorax, which with *H. interioris* are "parvis acutis extorsum retrorsumque inclinatis." Moreover, if I have identified *H. interioris* correctly in a much larger species from La Grange Bay, the abdomen is coarsely and deeply punctate, while the prosternum is finely punctate—the reverse being the case with *H. puncticollis*. The species differs widely from the other two

western forms in the very different elytral sculpture. The three apical joints of antennæ are wanting. Type in the National Museum, Melbourne.

A second specimen, labelled W.A., measuring $21\frac{1}{2} \times 9$ mm., is in the consignment of insects sent by Mr. Blair from the British Museum; both are, I think, males.

HYPAULAX SPENCERI, n.sp.

Oblong-ovate, nitid black above and beneath, antennæ piceous (reddish towards apex), tarsi clothed beneath with red hair.

Head distinctly punctate, epistoma and canthus coarctate, the canthus shorter and more knobbed than in *H. insularis* Hope, forehead very convex, ridged at the sides, with a horseshoe-impression; antennæ moderately enlarged at apex. *Prothorax* 5×6.5 mm., slightly wider behind than in front, apex subtruncate, the widely rounded anterior angles scarcely advanced, widest behind middle, sides widely diverging to the widest part, then rather abruptly but not angularly converging (subsINUATELY) to the obtuse undentate posterior angles; base truncate; lateral border rounded, thick, raised and nitid, forming a sulcate channel within, its extreme outline faintly crenulated, basal border thin and accentuated by a transverse sulcus meeting the lateral sulcus at the angles; disc more convex than in *H. insularis*, with a faintly impressed medial line, a fovea on each side of this, and a larger depression between the foveæ and the sides at their widest; minutely and closely punctate. *Scutellum* very transverse and thin. *Elytra* slightly wider than the prothorax at base, obovate, with nine rows of large, elongate foveæ placed in deep sulci, the ninth on the lateral sulcus only distinctly punctate anteriorly, the intervals narrower and more convex than in *H. insularis*; minutely punctate; *submentum* finely transversely rugose, gular furrow well marked; prosternum coarsely rugose-punctate anteriorly, its process very convex, and not raised at apex; mesosternum and abdomen coarsely punctate and longitudinally rugose; mandibles bifid at apex. *Dimensions*, 16×7 mm.

Hab.—Flora River, Northern Territory (Professor Baldwin Spencer).

A single male specimen, sent by the Melbourne Museum, taken by Professor Spencer, in whose honour I name it, is a close ally of *H. insularis* Hope(= *iridescens* Blkb.), from which it may be distinguished by (1) its entirely nitid upper surface; (2) the much thicker margin of prothorax, with wider anterior and unproduced posterior angles; (3) the longer and more deeply placed foveæ of the elytra; and (4) the coarsely rugose-punctate under-surface, (the same in *H. insularis* being finely and sparsely punctate) besides other minor differences. Type in the National Museum, Melbourne.

ENCYALESTHUS EXCISIPES, n.sp.

Elongate, convex, nitid black, oral organs, antennæ, and tarsi red.

Head closely and clearly punctate, epistomal suture distinct and straight, continued obliquely outwards to the margins, canthus little raised, space between eyes flat and not much wider than the width of one eye, very convex behind; antennæ extending a little beyond the base of prothorax, joint 3 longer than 1-2 combined, 7-11 considerably and successively widened. *Prothorax* 3.5 × 4 mm., convex, truncate at apex, anterior angles widely rounded, depressed, not emarginate, widest about the middle, sides slightly rounded, not at all sinuate, posterior angles obtuse, not at all produced, base biarcuate, subangulate in the middle, lateral and basal border narrow (as in *E. punctipennis* Pasc.), disc closely and evidently punctate, without foveæ or middle line. *Scutellum* triangular. *Elytra* considerably wider than prothorax at base, twice and two-thirds as long, very convex and slightly widened behind the middle, lightly striate-punctate, with eight rows of punctures, besides a lateral and a short scutellary row placed in irregular striæ, these more deeply impressed at sides and apex, the punctures of about the same size but generally more closely placed than in *E. punctipennis* Pasc., the intervals minutely but evidently punctate; underside finely punctate, the abdomen longitudinally rugose; femora swollen towards apex, tibiæ without apical spines, the male with front tibiæ slightly bent at apex, the posterior tibiæ hollowed on



the inside, giving an appearance of an excision. *Dimensions*, 11.5-13.5 × 4.5-5.5 mm.

Hab.—Kuranda, North Queensland (F. Dodd and A. M. Lea).

Four specimens, two of each sex, examined, one sent to me some time ago by Mr. Dodd, the other three, taken by Mr. Lea, evidently differ from the well-known *E. punctipennis* Pasc., in the following characters: (1) form wider and more robust, (2) colour more nitid, (3) antennæ stouter, and especially more enlarged apically, (4) elytral striæ more distinct, seriate punctures closer, (5) stouter femora, and the posterior tibial excision of the male. Type in the author's Coll.

PROMETHIS MAJOR, n.sp.

Elongate-obovate, nitid black, antennæ piceous, tarsi and apex of tibiæ clothed with red tomentum.

Head as in *P. nigra* Bless., but with stronger punctuation, the antennæ also stouter and more evidently punctured. *Prothorax* 6 × 7.2 m.m., subquadrate, widest in front, the apex nearly straight, anterior angles widely rounded, reflexed and projecting outwards, lateral border thickened in front, narrowed and slightly sinuate behind, without any twist or crenulation, base bisinuate, posterior angles obtuse, but less so and more prominent than in *P. nigra*; disc closely punctate, the medial line deeply sulcate, but not quite extending to apical border. *Scutellum* punctate, curvilinear-triangular. *Elytra* obovate, much wider than and more than three times as long as the prothorax, striate-punctate, each elytron with nine rows (besides a short scutellary row) of large round punctures, the punctures close but not contiguous, nor at all hidden in the striæ; the first two rows continuous to apex, the third and fourth connected, the fifth and sixth connected in front of the former, the seventh and eighth connected behind the preceding, the ninth on the sides containing less defined punctures; the intervals rather sharply convex and very minutely punctate. *Abdomen* closely but irregularly covered with large round punctures, these larger, deeper and more numerous than in *P. nigra* Bless., meso- and metasternum rugose, their sides only punctate, prosternum transversely rugose.

♂. With front tibiæ strongly bent inward at apex, and clothed with a tuft of tomentum.

♀. With front tibiæ slightly arcuate, but not bent inwards.

Dimensions: ♂, 29×11 mm.; ♀, 25×10 mm.

Hab.—Gympie, Queensland (R. Illidge).

I have seen three specimens of this, amongst the large number of *Promethis* examined, two from the British Museum, one much damaged and ancient; the other, the female type, labelled "Australia." The male type was taken by Mr. Illidge at Gympie, and given to me, with many other generous gifts. The species evidently differs from the many varieties of *P. nigra* Bless., in (1) the unusually widened apex of prothorax, the angles of which, in the ♀ type, form distinct lobes; (2) the much coarser punctures of the elytral series, not at all concealed in the striæ; (3) the even more markedly coarser punctuation of the abdomen; (4) the much more sharply convex intervals of the elytra. While a few examples of *P. nigra* Bless., approach *P. major* in size, the latter is larger and wider than the general average size of *P. nigra* Bless.

PROMETHIS LOBICOLLIS, n.sp.

Elongate, parallel, subnitid-black, antennæ piceous-red, tarsi (and apex of tibiæ in ♂) clothed with red hairs.

Head densely and strongly punctate, the mentum of ♂ not bearded; mandibles bifid at apex, last joint of palpi securiform, mentum subcordate, carinate in the middle, submentum coarsely rugose-punctate, gula transversely wrinkled; labrum emarginate, straight and ciliate; epistoma straight in front, obliquely rounded at sides, meeting the canthus at a sinuate angle, limited behind by a straight depression becoming more defined and sulcate at the sides; antennæ with joint 3 not longer than 1-2 combined, and similar to that in *P. angulata* Erichs. Prothorax 4.5×5 mm., subquadrate, a little advanced and raised in the middle at apex, base truncate, except at the angles; anterior angles depressed and rounded, not advanced, sides feebly arcuate (in one example slightly wider in front, and straight in the middle two-thirds), abruptly incurved near base, the posterior angles, in ♂, produced behind

into a small, swollen, lobate process (somewhat as in *Cardiothorax egerius* Pasc.); in the ♀ specimen, the lobe is reduced to a small sub-rectangular tooth, pointing outwards rather than behind; lateral and basal border entire, except for a single crenulation near the base in ♂, narrowly reflexed, sulcate within; this border narrowed and terminated on the apex; disc closely and definitely punctate, with a faint suggestion of a smooth middle line. *Scutellum* triangular with rounded sides, clearly punctate. *Elytra* wider than prothorax at base and thrice as long, sides nearly parallel throughout, shoulders rather squarely rounded, disc with eight fine crenulate costæ, the crenulation formed by rows of large punctures on the outside of each, the punctures rather smaller than the seriate punctures in *P. angulata* Erichs., the second and third, fourth and fifth, sixth and seventh meeting in pairs near apex; a short scutellary and an extreme lateral row of punctures, the latter continuous to apex, the intervals between costæ wrinkled and closely punctate. Abdomen and mesosternum densely and very definitely punctate, prosternum less deeply so. Femora coarsely punctate, ♂ with a small tooth on inner margin of fore and middle femora near the base, tibiæ finely punctate, grooved and carinate; strongly curved and elongate in ♂. *Dimensions*: ♂, 20 × 6.5 mm.; ♀, 16 × 5.6 mm.

Hab.—Kalgoorlie and Kookynie (Messrs. Duboulay, senior, and E. Duboulay).

Three specimens, two ♂, one ♀, are the only specimens I have ever seen, and are quite distinct from the described species in the shape of the prothorax, and the stronger surface-punctures. One specimen, ♂, shows much more puncturation than the *P. lobicollis* ♀. others, possibly due to immersion in spirits. The elytral sculpture is unlike that of any other Tenebrionid known to me, and may deserve generic position, but as it possesses all the salient



Fig. 1.

P. lobicollis ♂.



Fig. 2.

P. lobicollis ♀.

characters of *Promethis*, as briefly given by Pascoe, I prefer not to multiply genera in its favour. Types in the Author's Coll.

PROMETHIS MINOR, n.sp.

Elongate, parallel, piceous-black, subnitid, underside piceous-brown, more nitid, antennæ and tarsi red.

Head much more coarsely punctate than in *P. quadricollis* Pasc., the antennæ shorter, and a paler red. *Prothorax* 3×4 mm., widest at middle, subtruncate at apex, the middle slightly raised and more nitid than the rest, anterior angles rounded, obtuse, and declinate, sides rather widely rounded, lateral border narrow, even and entire, turned downwards, rather abruptly narrowed, but scarcely sinuate behind; posterior angles widely obtuse, base bordered and sulcate, apex without border, disc distinctly and evenly punctate, the punctures deeper and more distant than in *P. quadricollis* Pasc., medial channel distinctly impressed but not quite continuous to apex. *Scutellum* triangular. *Elytra* wider than prothorax at base, and thrice as long, shoulders rather squarely rounded, sub-cylindric, narrowly marginal throughout, striate-punctate, seriate punctures smaller and more distant than in *P. quadricollis* Pasc., becoming larger towards sides, intervals convex and finely punctate; abdomen sparsely and finely punctate, slightly wrinkled at the edges of segments, metasternum finely rugose, prosternum nearly smooth. Front tibiæ of ♂ slightly curved, and finely tomentose at apex (straight in ♀). *Dimensions*, 14×5 mm.



Fig. 3.
P. minor.

Hab.—Rockhampton, Queensland.

Three specimens, 1 ♂, 2 ♀, in the British Museum consignment, sent to me by Mr. Blair, are evidently distinct from the common *P. quadricollis* in (1) smaller size and cylindric form; (2) less nitid, browner-black colour; (3) prothorax with sides and angles more turned downwards, the wider angles, and the much more rounded sides without any sign of crenulation at margin; (4) more

evident punctures of elytral intervals, and finer punctures of the underside. Types in the British Museum.

TEREMENES SOCIUS, n.sp.

Elongate, parallel, nitid-black; oral organs, clothing of tarsi, and (in some examples) the underside of legs pitchy-red.

Head densely and strongly punctate, clypeal suture arched and well impressed, eyes large and rather prominent, antennæ not reaching the base of prothorax, the apical joints moderately enlarged. *Prothorax* about as wide as long (3.5 m.m.), widest in front of middle, subtruncate at base and apex; anterior angles rather widely rounded and depressed, scarcely advanced, sides gently converging backwards in a feeble curve, slightly sinuate behind; posterior angles narrowly dentate and extended, sides and base sulcate within the border, disc slightly gibbous in the middle of the anterior portion, densely and clearly punctate, generally with two foveæ near the basal border, and without any medial line. Scutellum curvilinearly triangular. *Elytra* wider than prothorax at base, twice and one-half as long, sides subparallel, or slightly widened behind in the female; striate-punctate, the punctures in the striæ smaller and closer than in *T. convexiusculus* Hope; the intervals distinctly punctate, and, towards the apex, a little convex. Underside-structure as in *T. convexiusculus*, but much more strongly punctured, especially on the abdomen. The male is distinguished as in *T. convexiusculus* by the longer and strongly curved front tibiæ, with their tuft of golden hair at the apex, which is absent from the female. *Dimensions*, 10.14 × 4.44 mm.

Hab.—North Queensland: Coen (Hacker), Cairns (Lea), Cooktown, Ayr.

Several specimens examined, differ from the widely dispersed *T. convexiusculus* Hope in the more strongly sculptured surface, both above and beneath, in marked contrast to the almost impunctate pronotum and abdomen of Hope's species. The lateral border is also narrower, the front angles less depressed and more evident, the hind angles sharper than in *T. convexiusculus* Hope (*servulus* Pasc.). Types in the Author's Coll.

MENEPHILUS LÆTUS, n.sp.

Near *M. corvinus* Erichs., (= *M. cyaneipennis* Hope), the whole upper surface bright blue (sometimes purplish), underside black, antennæ and legs castaneous.

Head very finely punctate, epistomal suture straight, prothorax subquadrate, truncate at base and apex, twice as wide as long, moderately arcuate and not all sinuate at sides; lateral margin and channel narrow, basal margin thicker; disc without foveæ or middle line, minutely punctate (only apparent under a strong lens); anterior angles rather squarely rounded, posterior angles obtuse but defined. Elytra parallel, cylindric; striate-punctate, the striae narrow, the punctures small and regular, intervals flat on disc, slightly convex towards the sides and minutely punctate. *Dimensions*, $10-12\frac{1}{2} \times 4-4\frac{1}{2}$ mm.

Hab.—Kuranda, North Queensland (F. Dodd and A. M. Lea).

I have identified *H. corvinus* Erichs., from specimens taken at Dorrigo, New South Wales, and compared with specimens sent from the British Museum. The above differs from it in its shorter and more convex form, nonsinuate sides of prothorax, the anterior angle squarer, posterior obtuse (acute in *M. corvinus*), much finer punctures, while the elytra are more glossy, and *not* as in Erichson's species "subtiliter transversim rugulosis" but are minutely punctate. Types in the Author's Coll. (eight specimens examined, four sent me by Mr. Dodd, and four taken by Mr. Lea in the same district.)

MENEPHILUS BREVIS, n.sp.

Short, parallel, convex, head and pronotum purple-bronze or blue, elytra variegated, in general green with metallic reflections, the suture purple, all appendages and underside castaneous.

Head short and wide, epistoma rounded and tumid, its suture straight, eyes just free of prothorax, antennæ attenuated at base, 7-10 enlarged and subtriangular, 11th spherical; whole surface and that of the pronotum densely, and by no means finely punctate. *Prothorax* subquadrate, but arcuately narrowed in front, its acute anterior angles rather strongly produced; rather depressed and

slightly explanate; sides (except for the slight narrowing in front) nearly straight, base faintly bisinuate, posterior angles subrectangular. *Scutellum* very small, punctate. *Elytra* of the same width as prothorax at base, shortly cylindric, and bluntly rounded behind; striate-punctate, with eight striæ containing fine, close punctures, the intervals flat (slightly convex at the sides) and minutely punctate; legs smooth, abdomen and epipleuræ rather closely and strongly, prosternum and gula coarsely punctate; prosternal process with raised crenulate margins, the first segment of the abdomen with a fovea between the coxæ. *Dimensions*, $4\frac{1}{2}$ -5 \times 2-2 $\frac{1}{4}$ mm.

Hab.—Brisbane (R. Illidge), Kuranda (G. E. Bryant); Acacia Creek, N.S.W. (The Author).

Five specimens of this pretty little insect differ only in colour, the Acacia Creek specimen being the most brilliant, the head and pronotum being blue-green, the elytra purple at suture, then blue, green, gold, purple, blue, and gold (on sides), succeeding one another. Types in the Author's Coll.

MENEPHILUS RECTIBASIS, n.sp.

Elongate, parallel, nitid-black above and beneath, tarsi and antennæ red (tibiæ sometimes reddish).

Head minutely punctate on epistoma, more coarsely so on forehead, the former surface extended backward more than usual, and defined by arcuate depression, eye-sockets more deeply hollowed than in *M. Sydneyanus* Blkb., the antennæ shorter and less enlarged apically than in that species. *Prothorax* 2.5 \times 3 mm., apex bisinuate, advanced in the middle, the anterior angles acute and strongly advanced, sides feebly arcuate, narrowed apically, almost straight on posterior two-thirds, base truncate, posterior angles sharply rectangular, lateral margins raised, distinctly sulcate within, basal border narrow but clearly defined, disc densely and finely punctate, without central line, and with two small and inconspicuous basal foveæ. *Scutellum* transversely oval. *Elytra* scarcely, or very slightly, wider than prothorax at base and more than twice as long, shoulders rather sharply rectangular, sides parallel, less convex than *M. Sydneyanus* Blkb., striate-punctate, the seriate punctures small and closely placed in deep striæ, inter-

vals convex, and finely punctate (the punctures becoming larger and intervals sharper towards sides). *Abdomen* densely and delicately punctate, prosternum finely striolate, tibiæ straight, or nearly so, the anterior tibiæ strongly and angularly dilated at apex, especially in ♂. *Dimensions* 9-10 × 3 mm.

Hab.—Dorrigo (H. Cox, W. Heron), Richmond River (British Museum).

Ten specimens under examination, of which two, in the consignment from the British Museum, are intermediate between *M. Sydneyanus* Blkb., and *M. colydioides* Erichs. Possibly it has often been overlooked by collectors in mistake for the common *M. Sydneyanus* Blkb., which I have from the same district. It can be readily distinguished from Blackburn's species by (1) prothorax with unproduced hind angles and truncate base, the distinctly sulcate sides, and the absence of the basal transverse depression; (2) elytra of flatter form, more deeply striate and more convex intervals; (3) much more distinctly punctate thorax and underside; (4) the straight tibiæ of ♂, with their angulately dilated apex (the same being strongly bent downwards, and rounded at apex in *M. Sydneyanus*). From *M. colydioides* it can be distinguished by its wider form, more nitid-black colour, prothorax with more produced anterior angles with wider lateral border and sulcation within. (N.B.—*M. Sydneyanus* Blkb., ranges from Victoria to South Queensland, while I have specimens of *M. colydioides* Erichs., from Tasmania, Victoria, and New South Wales). Types in the Author's Coll.

MENERISTES DENTIPES, n.sp.

♂. Elongate, subcylindric, polished nitid-black; antennæ, palpi, and tarsi dark red; apex of front tibiæ with large tuft of red tomentum, tarsi scantily clad with a few reddish hairs.

Head minutely punctured on forehead, more closely on epistoma, and finely rugose-punctate on the neck; epistoma truncate in front, with a deep, straight sulcus behind, arcuately continued in front of canthus, with two straight longitudinal sulci produced backward in front of the eyes; antennæ short, scarcely reaching beyond the front third of prothorax, considerably widened out-

wards, joint 3 scarcely longer than 4, 8-10 subquadrate, 11 nearly round. *Prothorax* 5×5.6 mm., more convex than in *M. laticollis* Pasc., widest near middle, apex slightly bisinuate, the middle a little advanced, anterior angles widely rounded, scarcely advanced, sides gently rounded, sinuate behind when viewed sideways (due to subangulate depression of border at this point), base nearly straight, posterior angles rather bluntly acute and produced; sides, base, and the greater part of apex with raised border, the lateral border not so evident from above as in *M. laticollis* Pasc., due to its greater convexity; a narrow sulcus within border throughout, except at the middle of apex, border thickened at the posterior angles; disc quite smooth, highly polished, with four foveate depressions, one near each angle within the apical and basal border respectively, and a faint beginning of a central depression at base and apex. *Scutellum* triangular. *Elytra* wider than prothorax at base, and nearly twice and one-half as long, more convex and parallel than *M. laticollis* Pasc., shoulders advanced and rather squarely rounded, striate-punctate, with nine rows, besides a



Fig. 4.

M. dentipes. short scutellary row of large round punctures, no wise concealed by the striae, the terminal puncture at base especially large and deep; intervals convex and smooth. Gula finely, transversely rugose, prosternum finely punctate, metasternum and abdomen nearly smooth, except for a row of punctures at front edge of second and third segments, and some minute striae; femora smooth, front tibiae unusually bent downwards and inwards, deeply excavated, carinate on the inside, with two teeth, one wider near base, the second conical on the upper third; middle and hind tibiae straight on the outer edge, the middle tibiae with two teeth, the one near the apex far more acute, posterior tibiae also bidentate, with a large conical tooth near the middle, the other wide and round, emerging into the unusually widened apex. *Dimensions*, 19-20 \times 7 mm.

♀. Wanting.

Hab.—Coen River, Cape York (H. Hacker), Queensland (British Museum).

Two male specimens examined, one taken by Mr. Hacker, in 1906; a second, labelled Queensland 77-27, in the British Museum consignment to me. The tibial characters are remarkable, and are shown in my outline figure; while its highly polished surface, cylindric form, large seriate punctures, and less produced angles of thorax, easily distinguish it from the common *M. laticollis* Pase. Type in the Author's Coll.

MENERISTES TIBIALIS, n.sp.

♂.Elongate, parallel, polished ebony-black; antennæ, palpi and tarsi castaneous, front tibiæ with a few red hairs at apex.

Head rather coarsely punctate on forehead and labrum, with a smooth arched space connecting the eyes, more densely and finely punctate on epistoma, the latter straight in front, limited behind by arched sulcus, canthus oblique and raised, antennæ extending to two-thirds of prothorax, joint 3 as long as 1-2 combined, longer than 4, joints 8-10 transverse but somewhat quadrate, 11th elongate-ovate. *Prothorax* 5 × 6 mm., widest at middle and base, one-third narrower at apex, feebly bisinuate at apex (a little drawn back in middle); anterior angles obtuse, scarcely rounded and well advanced, sides gently arcuate widening to middle, feebly sinuate behind; posterior angles acutely produced, pointing directly backwards and downwards, with narrow reflexed border at sides, terminated and thickened at the posterior angles, attenuated but continuous throughout at apex, base without raised border, sides with narrow sulcus within border, widened into a horizontal lamina towards the anterior angle, base bisinuate; disc minutely not closely punctate, with two large and deep basal foveæ, comma-shaped, occupying half the space between the angles and the middle, a faint indication of depressed middle line (not shown in one example). *Scutellum* triangular, minutely punctate.



Fig.5.

M. tibialis.

Elytra wider than prothorax at base, and twice and one-third as long, shoulders rather squarely rounded, sides narrowly margined, striate-punctate, with nine rows, besides a short scutellary row of rather small punctures, closely placed in deep striæ, intervals strongly convex and distinctly punctate (more evidently so than in *M. laticollis* Pasc.), gula densely and coarsely punctate, prosternum finely rugose-punctate, metasternum, abdomen, middle and hind femora very finely rugose and minutely punctate; front femora more densely and coarsely punctate, front tibiæ swollen in middle, strongly widened and curved near apex only, this wide curved lobe coarsely punctate; carinate on outside edge, this carina widened into a rounded tooth or emargination at apex, with two short blunt spurs; middle tibiæ strongly curved and similarly but less widened at apex, hind tibiæ slightly curved with an angulate emargination or triangular tooth on inside edge below the middle, apex less enlarged than in the other tibiæ, the four hind tibiæ with long apical spurs.

♀. With all tibiæ straight, much less enlarged at apex, hind tibiæ without the emargination.

Dimensions of type ♂, 20 × 8 mm., other specimens from 18 × 7 mm.; of ♀, 19.23 × 7.9 mm.

Hab.—Victorian Alps (The Author), *Queensland*(?), and New South Wales.

Three male specimens examined, two from the Victorian Alps taken by myself, with four corresponding females; the third male, with a female, is labelled N. Queensland, but I have no record of their capture; a very large female was taken by my son, at Gynken, Blue Mountains.

The species is easily separated from its allies, in male specimens by the single tooth on the hind tibiæ. It has the polished surface of *M. dentipes*, with much more anteriorly narrowed prothorax and sharper angles. Even female specimens may be distinguished from *M. laticollis* by the more polished black colour, the more produced and sharper angles, and widened margins near the front angles of prothorax. Types in the Author's Coll.

Var. *proximus*, n. var.

A provokingly closely allied species, of which both sexes, from Dorrigo and Acacia Creek, and Tambourine Mountain, is without the emargination on the hind tibiae of the ♂; the only other differences to be noted are (1) larger seriate punctures of elytra; (2) sides of prothorax less arcuately widened but more sinuate behind; (3) posterior angles of prothorax directed a little outwards; and (4) tibiae less curved and enlarged at apex in ♂.

MENERISTES LATIOR, n.sp.

♂. Widely ovate, polished ebony-black; antennae, palpi, and tarsi castaneous, front tibiae with a fringe of red tomentum at apex.

Head: labrum emarginate and coarsely punctate, forehead coarsely, epistoma densely and more finely punctate, the latter straight in front, rectangular at sides, meeting the canthus at a wide angle, limited behind by a defined semicircular sulcus; antennae extending to two-thirds of prothorax, considerably widened at apex, joint 3 as long as 1-2 combined, 8-10 transversely oval, 11th nearly twice as long as 10, ovate. *Prothorax* 5.5 × 7 mm., widest in front of middle, much less narrowed in front than in *M. laticollis* Pasc., or *M. tibialis*, and nearly as convex as in *M. dentipes*; apex bisinuate, middle portion advanced, anterior angles widely rounded but advanced, sides moderately arcuate, sinuate behind, posterior angles acutely produced backwards and a little outwards, base strongly bisinuate, extreme border narrow on sides, thickened towards and at the posterior angles, very narrow but uninterrupted at apex, obsolete at base, sides with a wider marginal channel than usual, less widened in front than in *M. tibialis*, but more marked than in *M. laticollis* Pasc., disc microscopically punctate, highly polished, with two deep foveate excavations at base near angles, and only the faintest suspicion in one example of a medial depression. *Scutellum* widely triangular. *Elytra* very little wider than prothorax at base, ovate, twice and one-third as long, shoulders rather widely rounded but prominent;



Fig. 6.
M. latior.

striate-punctate, intervals sharply ridged, seriate punctures larger than in *M. tibialis*, more closely placed than in *M. laticollis* Pasc., intervals apparently quite impunctate; underside very finely striolate, prosternum finely transversely rugose, femora smooth, tibiæ coarsely punctate on under surface, (on upper surface at apex only). Front tibiæ moderately curved and enlarged at apex, external carina triangularly enlarged at apex, middle and hind tibiæ less curved and enlarged, apical spurs long. *Dimensions* of type ♂, 21×8.5 mm.; other specimens from 17×6.2 mm.

Hab. — Dorrigo, N.S.W. (R. J. Tillyard).

Five specimens examined, all males. I can find no females to match them. The species is separated from its allies by the great width of the prothorax, very little less than that of elytra at base, also the great width of elytra compared with length. Thus in *M. laticollis* Pasc., the elytra are nearly exactly twice as long as wide. In *M. latior*, the length is only once and two-thirds the width. Type in author's Coll.

TOXICUM INSIGNE, n.sp.

Elongate, parallel, dull brownish-black above, without the usual indumentum; oral organs, antennæ, legs, and underside piceous.

♂. *Head* concave, punctate, the clypeal horns degraded into conical tubercles situated at the corners of the clypeus, frontal horns strongly incurved at base and apex, the apices slightly widened and deflexed, nearly meeting, with a fringe of golden hair on the outside only, extending but narrowing almost to the extreme base; antennæ with a distinct 4-jointed club, the 8th joint clearly differentiated in size and shape from the 7th. *Prothorax* bisinuate at base and apex, widest in front, about as wide as long (4 mm.), anterior angles rather squarely rounded, sides nearly straight and gently converging to base, posterior angles obtuse, not produced; disc densely and uniformly punctate, sometimes with a faint depression to denote a medial line. *Scutellum* curvilinearly triangular. *Elytra* wider than prothorax at base, and twice and one-half as long, shoulders rather square, sides nearly parallel till near apex; striate-punctate, the intervals convex, the punctures smaller and closer than in *T. punctipenne* Pasc., the basal part of elytra

with irregular, confused punctures of the same size as those in the series. Sternum, especially the prosternum, very coarsely punctate, abdomen less coarsely punctate. Front femora enlarged but not dentate, tibiæ widely dilated at the apical two-thirds.

♀. Without the (clypeal) tubercles, the frontal horns replaced by two wide conical tubercles, the antennal club smaller, the tibiæ only slightly dilated at apex.

Dimensions, 16×5 (vix) mm.

Hab.—Lynndoch, S.A. (Tepper); Young, N.S.W. (Sloane): Teralga, N.S.W., and South Australia (British Museum).

Eight specimens (5 ♂, 3 ♀) examined; three from the South Australian Museum, two from the British Museum, three from the Melbourne Museum, labelled from the above localities. It is easily distinguished by its greater size, the form of the male horns, its different elytral puncturation, and the curiously widened tibiæ of the male. Types in the South Australian Museum.

TOXICUM QUINQUE-CORNUTUM, n.sp.

Elongate, parallel, opaque-black above, nitid-black beneath; antennæ and tarsi piceous, the apical joints of the former red.

Head densely and strongly punctate, clypeus three-horned, the middle one largest and widely triangular, obliquely pointing upwards, its base occupying the whole front of clypeus, with two shorter triangular elevations forming a dentate extension, forwards and upwards, of the canthi; the frontal horns flattened, widest when seen laterally, sharply curved inwards at base, twisted backwards at apex, with a very small tuft of yellow tomentum on the outside of apex; club of antennæ moderately wide and four-jointed, joints 9 and 10 largest, and rounded. *Prothorax* 3×2.6 mm., bisinuate at apex and feebly so at base, slightly widest at apex, anterior angles rather squarely rounded and depressed, sides nearly straight and slightly narrowed to base, posterior angles obtuse; disc very finely and densely punctate, with a faint indication of a smooth middle line. *Scutellum* triangular. *Elytra* wider than prothorax at base, and twice and one-half as long; striate-punctate, the punctures in the striæ regular; of the same size, but more distant than in *T. brevicorne* Pasc. Underside sparsely punctate, the

punctures on prosternum largest. Femora unarmed, tibiæ slender. *Dimensions*, 10×3.5 mm.

♀. Wanting.

Hab.—New South Wales (Bellingen ?).

A single ♂ specimen, kindly given to me by Mr. W. Duboulay, probably from Bellingen, is easily distinguished by its remarkable clypeal and frontal appendages. Type in the Author's Coll.

In my revision of the *Cyphaleinae*, I have unfortunately used generic titles that are preoccupied. Thus *Mitrephorus* has been used by Schönherr, (Col., 1837; Seudder, Nom. Zool.), and *Toreuma*, by Haeckel (Index Zool., 1902). Moreover, it appears that *Ctimene* Bates, was also used by Boisduval in Lepidoptera; and *Chariotheca* Pasc., is preoccupied by Dejean (Col. 1833; Seudder, Nom. Zool.). I, therefore, propose the following changes: For *Mitrephorus* Cart., substitute *Mitrothorax*, n.gen.; for *Toreuma* Cart., substitute *Eutoreuma*, n.gen.; for *Ctimene* Bates, substitute *Timeneca*, n.gen.; for *Chariotheca* Pascoe, substitute *Chariothes*, n.gen.

Errata.—On. p. 105, These Proceedings, 1903, In the Explanation of Plates, for *Chlorophanes*, read *Trisilus*; and on p. 65, for *Lygestria* read *Lygestira*; and for *Mithippa* read *Mithippia*.

Platyphanes vittatus Westw.—Mr. Blair lately informed me that he had written to Geneva, and that Dr. Weber had kindly sent him the type of *P. vittatus* Westw. It is Pascoe's *Opigenia iridescens*, which, accordingly, must be now known as *Opigenia vittata* Westw. As regards *P. aculeatus* Westw., and *P. striato-punctatus* Westw., Dr. Weber states that neither of them is at Geneva, though both types are stated to be in the Melly Coll. This is most unfortunate, as leaving the identity of *P. aculeatus* Westw., with *Mærodes Westwoodi* MacL., unsettled. The following new species have been received since the publication of my revision.

Subfamily CYPHALEINÆ.

PLATYPHANES DENTICOLLIS, n.sp.

Elongate, parallel, black; head and thorax opaque, elytra and underside subnitid, tarsi and antennæ piceous, the former clothed with red hair.

Head: labrum squarely emarginate, rufo-ciliate in front, epistoma truncate, its sides rounded, making nearly a right angle with the flat, elongate, and parallel canthus, the suture arcuate and sub-obsolete in the middle; front depressed, the whole coarsely and deeply punctate, space between the eyes as wide as the transverse diameter of one; antennæ short, extending to one-half the length of prothorax, greatly enlarged apically, joint 3 longer than 4, 4-7 obconic, 8-10 transverse, successively wider and more ovate, 11 as wide as 10, oval. *Prothorax* 5×8.5 mm., widest in middle, wider at base than at apex, the latter nearly straight except at the angles, these slightly reflexed, produced obliquely outwards and forwards into a sharp triangular tooth, base bisinuate, sides slightly rounded in the middle, sinuate in front and (less strongly) behind; the posterior angles subrectangular, not produced; lateral border moderate, scarcely raised, not channelled within, apical border evident throughout. Disc with irregularly scattered round punctures, more crowded at the sides, with some smooth spaces near the middle. *Scutellum* curvilinearly triangular, punctate. *Elytra* wider than prothorax at base and four times as long, widely rounded at, and slightly gibbous near, the humeral region, sides parallel, apex rather wide and horizontal, gradually narrowed in front, obsolete at shoulders, narrowly bordered, the margin separated from the disc by a fine sulcus, showing a few close punctures on basal half; disc scarcely striate-punctate, with ten defined rows of large punctures besides a short scutellary row, and an abbreviated row of smaller punctures on the fourth interval; intervals somewhat tumid, and convex at the sides, minutely punctate; the seriate punctures round, and placed so that the distance between two is about the width of an interval, with slight variations of size and distance apart. *Submentum* closely pustulose, prosternum transversely rugose, its process coarsely punctate, bisulcate and widely rounded behind, compressed and nodulose in front, mesosternal cavity widely triangular, its edges swollen, sides of metasternum and epimera with large round punctures, basal segments of abdomen strigose and finely punctate, femora coarsely punctate, posterior tarsi with apical and clawjoint of equal length. *Dimensions*, 28×12 mm.

Hab.—Warra, Queensland (Mrs. Hobler).

A single (♂?) specimen, kindly given to me by Mrs. Hobler, is the largest described species, and differs from its nearest ally, *P. creber* Blkb., in its black elytra, its dentate anterior angles of prothorax, the absence of defined striæ, of which *P. creber* is said to have about 14. From *P. striato-punctatus* Westw., it differs still more, not only in the form of the prothorax, but in its wider, more parallel, and not at all cylindrical shape, with a quite different elytral sculpture. Type in the Author's Coll.

PLATYPHANES RUGOSULUS, n.sp.

Narrowly elliptic, very convex; head and pronotum nitid coppery-black, elytra dull coppery-brown, antennæ and tarsi fuscous, underside and legs black.

Head distinctly but not very closely punctate, epistoma straight in front, arcuately impressed behind, this impression joined by two shallow longitudinal impressions extending backwards behind the eyes, the latter rather widely separated; antennæ short and slender, moderately enlarged at apex, joint 3 cylindric, not as long as 4-5 combined, 4-7 obconic, 8-10 nearly round, 11 ovate. *Prothorax* $3 \times 5\frac{1}{2}$ mm., widest at base, apex arcuate, anterior angles obtuse, slightly depressed, scarcely advanced, sides arcuately widening to base, posterior angles produced and acute, base strongly bisinuate, lateral margins slightly raised, scarcely channelled within, disc finely punctate, with three small shallow foveæ at base. *Scutellum* triangular, punctate. *Elytra* of same width as prothorax at base, and more than thrice as long, elliptic, very convex, almost gibbous, with the highest point near middle, shoulders obtuse, narrowly margined throughout, striate-punctate, the striæ indistinct, quite obliterated towards apex, the second stria scarcely traceable throughout, the punctures in striæ small and not deeply impressed, intervals quite flat and finely transversely wrinkled; epipleuræ nearly smooth, abdomen very clearly and delicately striolate-punctate; prosternum carinate, its flanks coarsely and sparsely punctate, meso- and metasternum finely and sparsely, their epimera more coarsely punctate, mentum carinate in middle,

submentum rugose-punctate at sides, smooth in middle. *Dimensions*, 14×6.5 mm.

Hab.—Rockhampton, Queensland (Mr. H. Brown).

A single ♀ specimen, generously given to me by its captor, is nearest to *P. cyaneus* Pasc., and *P. ellipticus* mihi, in form, but is narrower and more convex than either, and quite different in colour and sculpture. It is distinguished by the contrast of nitid head and pronotum, with its subfuscous elytra, the sculpture of the intervals being irregularly and finely striate, like the skin of one's hand. Type in the Author's Coll.

OPIGENIA BROWNI, n.sp.

Oblong-oval, convex; upper surface green and blue with purple reflections, the suture golden; underside, legs and antennæ nitid-black, tarsi with a very thin clothing of red tomentum.

Head: epistoma truncate, angulate with the canthus, limiting suture subobsolete, canthus little raised, eyes separated by a space of the width of one, half concealed by thorax, coarsely and closely punctate, antennæ not reaching base of prothorax, joints 3-7 of equal length, 8-9 successively wider and subtriangular, 10 transverse, 11 shortly oval. *Prothorax* $3(\text{vix}) \times 5$ mm., widest at middle, wider at base than at apex, the latter circularly emarginate, the anterior angles produced, slightly rounded and obtuse, sides widely and evenly rounded, posterior angles rather widely acute, not dentate; base strongly bisinuate, lateral border moderate, narrowly concave within, apical border very narrow; disc very clearly and rather deeply punctate at sides and base with a large smooth transverse middle space, with no indication of a middle line. *Scutellum* triangular and punctate. *Elytra* as wide as prothorax at base, widening at shoulders, subparallel on middle third, evenly convex; striate-punctate, the intervals closely punctate, the seriate and interstitial punctures of almost equal size and scarcely differentiated. Prosternum closely rugose-punctate, slightly compressed and raised in middle, its process widely rounded behind, epipleuræ smooth, metasternum smooth in the middle, strongly punctured on sides and epimera; abdomen finely punctate and

striolate. Tibiæ straight, femora unarmed, posterior tarsi rather short, claw-joint longest. *Dimensions*: 15×7 mm.

Hab.—Southern Cross, West Australia.

A single specimen, ♀, was given to me by that very enthusiastic collector, Mr. H. W. Brown, amongst some *Chalcopteri*, which it somewhat resembles, except in the structure of head and thorax. It differs from *O. vittata* Westw., (a specimen of which is before me) in the following respects: (1) Colour less brilliant; (2) body more convex and robust; (3) prothorax with nitid spaces, the sides *much* more widely rounded, front angles wider, margins less reflexed; (4) elytral intervals more strongly punctured.

The prothorax is very similar, in form and colour, to that of *Prophanes chalcopteroides* Cart., which is a much larger insect; the elytra are similar, in shape and colour, to those of *Chalcopterus polychromus* Pasc., but the seriate punctures are less distinct. Type in the Author's Coll.

OLISTHENA RUFO-ÆNEA, n.sp.

Ovate, slightly convex; head and prothorax castaneous (margins rufous), elytra green-bronze; antennæ, legs, and underside pale red.

Head rather deeply enclosed in prothorax, epistoma short, round in front, widely impressed behind, evidently and clearly punctate, eyes separated by a distance greater than the diameter of one eye, antennæ short, not reaching base of prothorax, apical joints enlarged, two penultimate joints about as wide as long, eleventh elongate-ovate. *Prothorax* 2×3.5 mm., deeply bisinuate and and emarginate at apex, the middle lobe a little raised and advanced (this emphasised by the depression behind); anterior angles strongly advanced in front of eyes, acute but a little blunted at apex, sides nearly straight and gradually widened to apex, base bisinuate; posterior angles acute, a narrow horizontal margin within the raised border, widened at the angles; disc very finely and densely punctate, with two small basal foveæ and a large central depression on apical half. *Scutellum* triangular with rounded sides, punctate. *Elytra* of same width as prothorax at base and

thrice as long, slightly widening behind shoulders, narrowly bordered, irregularly punctate, with some indications of a lineate arrangement on middle, quite irregular, with smooth intervals on sides; prosternum short, compressed and subcarinate in front, its process triangular behind, with a corresponding mesosternal notch, and finely punctured, abdomen finely striolate, tibiæ slender. *Dimensions*, $7\frac{3}{4} \times 3\frac{1}{2}$ mm.

Hab.—Tambourine Mountain, South Queensland (H. Hacker).

Two specimens, kindly sent by Mr. Hacker, evidently differ from *O. tenuitarsis* Pasc., in the smaller size, coloured thorax and head, with much sharper and more produced front angles, more convex elytra. Type in the Author's Coll.

PROPIANES BROWNI, n.sp.

Elongate-ovate, navicular; coppery-bronze above and beneath, pronotum and scutellum more nitid copper, legs nitid-black, antennæ and tarsi brown, the latter and the tibiæ sparsely clad with red hairs.

Head and *pronotum* rather strongly but not very closely punctate, epistoma convex, with limiting sulcus strongly defined at the sides, subobsolete in the middle, canthus short and raised, eyes very large, prominent, and approximate, the separating lamina not wider than in *Anausis metallescens* Westw., but rapidly widening each way; antennæ extending beyond the base of prothorax, slender at base, moderately enlarged apically, joint 3 cylindric, not as long as 4-5 combined, 4-7 subequal in length, successively wider, obconic, 8 shorter and wider than 7, 9-10 longer than wide, much shorter than 8; 11th longer and wider than 10, ovate. *Prothorax* 5×6.5 mm., length measured in middle, widest at base, apex bisinuate, anterior angles produced obliquely outwards into long acute spines, sides slightly sinuate anteriorly and posteriorly, feebly widened in the middle, posterior angles spinose, obliquely pointing outwards, disc with two large basal and two smaller apical impressions, the latter at the angular emargination, base bisinuate, lateral and basal border narrowly raised. *Scutellum* large, curvilinearly triangular, minutely punctate. *Elytra* slightly

wider than prothorax at base, thrice and one-half as long, widening at the shoulders, then subparallel on middle third, then strongly tapering to a narrow apex, each elytron with a short external spine, shorter and more closely placed than in *P. Mastersi* Pasc. Disc moderately convex at base (much less so than in *P. Mastersi*), evenly declivous in all directions; irregularly and rather closely punctate, the punctures much smaller and closer than in *P. Mastersi*, these becoming obsolete towards apex, margins very narrow on front half, gradually becoming wider and horizontal apically; submentum with coarse round punctures, prosternum transversely rugose, strongly compressed and carinate, the process produced behind conically, into a widely raised V-shaped receptacle; mesosternum and epipleuræ very coarsely rugose-punctate, the latter rather abruptly terminating at the last abdominal segment, abdomen finely striolate, the last segment finely punctate, and terminated with a fringe of red hair; legs smooth, front femora swollen, posterior tarsi with basal and claw-joint of equal length. *Dimensions*, 23×10 mm.

Hab.—Kuranda, N. Queensland.

A single ♂ specimen, taken by Mr. H. W. Brown, adds another fine species; but it arrived too late to be included in my monograph of the group. It is intermediate in form and character between *Prophanes* and *Anausis*, but is much more convex and less parallel than the latter. Type in the Author's Coll.

Stigmodera suavis Cart.—This is a nom. præocc. by Kerremans (Insecta gen. 1902, p. 210). I therefore propose the name *S. venusta* for the species so described (These Proc. 1913, p. 507).

CHARIOTHES SUBVIOLACEUS, n.sp.

Rather widely ovate, convex; head, thorax, and underside very nitid-black, elytra with a violaceous tinge, antennæ and tarsi pale red, legs piceous (red at knees and apex of tibiæ).

Head strongly unevenly punctate, rather flat, epistoma slightly rounded in front, with a straight indistinct suture behind, eyes large, coarsely faceted and transverse, antennæ short, apical four joints considerably enlarged, joint 3 not longer than 4, apical

joint elongate. *Prothorax* 3.4×3 mm., rather convex and gibbous in middle at apex, widest at base, very little narrowed at apex, widely arcuate at apex, anterior angles obtuse, slightly depressed, and scarcely advanced, sides nearly straight (feebly arcuate) on anterior two-thirds, sinuate behind, posterior angles acute and slightly produced, base bisinuate, lateral border rounded and somewhat thick, with a very narrow sulcus within, disc clearly punctate, the punctures shallow and not close, a transverse depression behind middle and two basal foveæ. *Scutellum* small, triangular. *Elytra* ovate, convex, slightly gibbous in front of middle, of same width as prothorax at base and twice as long, widening behind, seriate-punctate, the punctures smaller and closer near suture, large and foveolate on sides and apex, general surface rather uneven, with some transverse ridges and depressions, narrowly bordered. Sternum closely, abdomen rather sparsely punctate, prosternal process concave in middle and punctate, imperfectly received into the triangular receptacle of the mesosternum. Fore and middle tibiæ curved, hind tarsi straight. *Dimensions*, 9×3.6 mm.

Hab.—Kuranda (H. Dodd).

A single specimen, sent by Mr. Dodd, is congeneric with *C. cupripennis* Pasc., but differs in its more explanate prothorax, its more gibbous elytra and uneven surface, *inter alia multa*. In form, it suggests *Campolene nitida* Pasc. Type in the Author's Coll.

Postscript (added 31st March).—The following extract from a letter received from Mr. R. G. Blair, of the British Museum, is of interest in evidence of the mystery connected with Boisduval's species. "I think I can clear up a few of Boisduval's species. Bates acquired, with La Ferte's Collection, a set of *duplicate* Heteromera from the Dejean Collection, and among these are probably cotypes, possibly types of Boisduval's species. These are as follows :—

Tenebrio australis Boisd. = *Meneristes intermedius* Pasc., a small specimen, resembling one seen by you (from Peak Downs).

T. nigerrimus Boisd. = *M. servulus* Pasc., (? = *convexiusculus* Hope). *T. nigerrimus* Blanch., (Blessig) = *M. laticollis* Pasc.

Uloma australis Boisd., (*Heterocheira*) correctly identified.

Amarygmus columbinus Boisd. = *Chalcopterus vinosus* Pasc. = *C. variabilis* Bless.

Adelium harpaloides Boisd. = *A. calosomoides* Kirby.

A. virescens Boisd. = *A. brevicorne* Bless.

In addition to these, there are a few specimens in the Bates Coll., bearing labels which agree with the labels on Dejeanian types of other families. These were probably acquired by Bates from Bakewell's Coll., though there is nothing to show this. Amongst these are the last two in the above list, and

Upis crenata Boisd. = *Hypaulax ovalis* Bates.

Cilibe brunnipennis Boisd., (*Saragus*), King George's Sound."